

IN THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) A method for tracking a transmission status of one or more data elements to one or more routing devices, comprising:

providing a list including one or more routing devices and one or more data elements, wherein each data element includes a routing entry in a routing table;

processing the list to determine a data element of said one or more data elements to transmit to a routing device of one of the one or more routing devices; and

upon successfully transmitting the data element to the routing device, adjusting the list so that the list indicates that the routing device has received the transmitted data element, the adjusting including repositioning the routing device, represented as a member of the list, within the list to be adjacent to the data element and to be closer to an end of the list than the data element.

2. (Previously Presented) The method of claim 1, wherein providing the list includes forming a linked list between the data elements and the routing devices.

3. (Previously Presented) The method of claim 1, wherein providing the list further comprises:

providing a global version number;

providing a local version number associated with each said data element in the list; and

providing a local version number associated with each said routing device in the list.

4. (Previously Presented) The method of claim 3, wherein when the data element is added to the list, the local version number associated with the data element is set to a value of an incremented global version number.

5. (Previously Presented) The method of claim 3, wherein the local version number associated with the routing device in the list is set to an initial value of zero.
6. (Previously Presented) The method of claim 3, wherein the local version number associated with the routing device in the list is set to an initial value of zero and is reset to the local version number of the data element after the data element is successfully transmitted to the routing device.
7. (Previously Presented) The method of claim 3, wherein providing the list further comprises:
 - providing a pointer to a start of the list; and
 - providing a pointer to an end of the list.
8. (Previously Presented) The method of claim 7, further comprising:
 - adding a data element to the end of the list; and
 - incrementing the global version number.
9. (Previously Presented) The method of claim 7, further comprising:
 - adding a routing device to the beginning of the list.
10. (Previously Presented) The method of claim 3, wherein the operation of processing the list further comprises:
 - locating the routing device in the list which is nearest to a start of the list;
 - obtaining a version number for the routing device; and
 - comparing the version number to the global version number to determine if the routing device should have the data element transmitted to the routing device.
11. (Previously Presented) The method of claim 10, wherein the comparing operation determines that the routing device should have the data element transmitted to the routing device if the version number of the routing device is not equal to the global version number.

12. (Cancelled)

13. (Previously Presented) The method of claim 3, wherein the operation of adjusting the list further comprises:

resetting the local version number of the routing device to be equal to the local version number of the transmitted data element.

14. (Previously Presented) A method for transmitting one or more data elements to one or more routing devices, comprising:

providing a list including one or more routing devices and one or more data elements, wherein each data element includes a routing entry in a routing table;

processing the list to determine a data element of said one or more data elements to transmit to a routing device of one of the one or more routing devices;

transmitting the data element to the routing device; and

adjusting the list to indicate that the routing device has received the transmitted data element, the adjusting including repositioning the routing device, represented as a member of the list, within the list adjacent to the data element and closer to an end of the list than the data element.

15. (Previously Presented) The method of claim 14, wherein providing the list includes forming a linked list between the data elements and the routing devices.

16. (Previously Presented) The method of claim 14, wherein the operation of providing the list further comprises:

providing a global version number;

providing a local version number associated with each said data element in the list; and

providing a local version number associated with each routing device in the list.

17. (Previously Presented) The method of claim 16, wherein the local version number associated with the data element in the list is set to a value of the global version number at a time when the data element was added to the list.

18. (Previously Presented) The method of claim 16, wherein the local version number associated with the routing device in the list is set to an initial value of zero.

19. (Previously Presented) The method of claim 16, wherein the operation of processing the list further comprises:

locating the routing device in the list which is nearest to a start of the list;
obtaining the version number for the routing device; and
comparing the version number to the global version number to determine if the routing device should have a data element transmitted to the routing device.

20. (Previously Presented) The method of claim 19, wherein the comparing operation determines that the routing device should have the data element transmitted to the routing device if the version number of the routing device is not equal to the global version number.

21. (Cancelled)

22. (Previously Presented) The method of claim 16, wherein the operation of adjusting the list further comprises:

resetting the local version number of the routing device to be equal to the local version number of a transmitted data element.

23. (Currently Amended) A router, comprising:

a module comprising a memory for providing to provide a list including one or more routing devices and one or more data elements, wherein each data element includes a routing entry in a routing table;

a module ~~comprising one or more processors for processing~~ to process the list to determine the data element of said one or more data elements to transmit to a routing device of one of the one or more routing devices;

a module ~~for transmitting~~ to transmit the data element to the routing device; and

a module ~~for adjusting~~ to adjust the list so that the list indicates that the routing device has received the transmitted data element, the adjusting including repositioning the routing device, represented as a member of the list, within the list adjacent to the data element and closer to an end of the list than the data element.